



DEPARTMENT OF TRANSPORTATION  
HAZARDOUS MATERIALS REGULATIONS BOARD  
WASHINGTON, D.C. 20590

16741

[ 49 CFR Part 179 ]

[Docket No. HM-63; Notice No. 70-20]

TRANSPORTATION OF HAZARDOUS  
MATERIALS

Tank Car Specifications

The Hazardous Materials Regulations Board is considering amending Part 179 of the Department's Hazardous Materials Regulations to remove the authorization for higher discharge safety valve settings on DOT Specifications 112A and 114A tank cars transporting liquefied petroleum gas and anhydrous ammonia. The Board also proposes to cease issuance and renewal of special permits authorizing these higher discharge safety valve settings on Specifications 112A and 114A tank cars, and special permits authorizing use of specifications 112A and 114A tank cars constructed with a welded joint efficiency of  $E=1.0$ . Upon adoption of this proposal, the Board would withdraw existing special permits of these two types.

As of this publication date, all outstanding special permits authorizing a discharge safety valve setting of 280.5 p.s.i.g. on specification 112A340W and 4A340W, or 330 p.s.i.g. on specification 12A400W tank cars, are hereby revised to preclude addition of new tank cars to such service. No further requests to

record tank cars under special permits authorizing these higher safety valve settings will be accepted. Requests to record tank cars constructed with a welded joint efficiency of  $E=1.0$ , and built after November 25, 1970, will not be accepted.

A continuing series of major accidents resulting in deaths, personal injuries, and massive property losses have involved tank cars of the above descriptions.

Section 179.102-11 presently allows discharge safety relief valve settings to prevent buildup of pressure in excess of 90 percent of tank test pressure. The Board is of the opinion that this percentage does not afford an adequate margin of safety in specifications 112A and 114A tank cars, and the Board is therefore proposing to remove that authorization for those cars. The highest allowable setting would be that specified in section 179.101-1. Consistent with this proposal, the Board would cease to issue or renew special permits authorizing such higher safety valve settings, and the Board is further proposing withdrawal of those special permits outstanding. The effective date for this withdrawal would be June 1, 1971.

Section 179.100-6 requires that the welded joint efficiency of pressure tank cars be  $E=0.9$ . This figure is inserted in the formula for determination of tank car plate thickness. All other factors remaining constant, an increase in the welded joint efficiency figure leads to a decrease in the required tank plate thickness. The Board has concluded that this reduction in plate thickness on specifications 112A and 114A pressure tanks is not in the interest of safety, and therefore its authorization by special permit should be discontinued. The Board is accordingly proposing to cease issuance and renewal of special permits granting such authorization, and upon adoption of this proposal would withdraw outstanding permits for  $E=1.0$  on specifications 112A and 114A tank cars, as of June 1, 1971.

Return to service of cars affected by the above permit withdrawals may be considered by the Board upon addition of adequate modifications or operational controls. Comments suggesting appropriate modifications of cars or operational controls will be appreciated.

In consideration of the foregoing, the Board proposes to amend Part 179 as follows:

(A) Section 179.102-11 would be amended to read:

§ 179.102 Special Commodity requirements for pressure tank car tanks.

§ 179.102-11 Liquefied petroleum gas or anhydrous ammonia.

(a) Specification 105A300W tank cars used to transport liquefied petroleum gas or anhydrous ammonia may as an alternative comply with the following special requirements:

(1) Safety relief valve may be set to the following pressures, provided the total valve discharge capacity is sufficient to prevent building up pressure in the tank in excess of 90 percent of the tank test pressure.

DOT specifications	105A300-W
Safety relief valves, p.s.i.:	
Start-to-discharge pressure-----	247.5
Start-to-discharge tolerance-----	7.4
Vapor tight pressure (minimum)---	196

Interested persons are invited to give their views on this proposal. Communications should identify the docket number and be submitted in duplicate to the Secretary, Hazardous Materials Regulations Board, Department of Transportation, 400 Sixth Street SW., Washington, D.C. 20590. Communications received on or before January 12, 1971, will be considered before final action is taken on the proposal. All comments received will be available for examination by interested persons at the Office of the Secretary, Hazardous Materials Regulations Board both before and after the closing date for comments.

This proposal is made under the authority of sections 831-835 of title 18, United States Code, and section 9 of the Department of Transportation Act (49 U.S.C. 1657).

Issued in Washington, D.C., on October 23, 1970.

CARL V. LYON,  
Acting Administrator,  
Federal Railroad Administration.

[F.R. Doc. 70-14545; Filed, Oct. 28, 1970;  
8:48 a.m.]